

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

-----X
VITOLI MOURZAKHANOV,

Plaintiff,

EXPERT DISCLOSURE OF
THEODORE J. MITROU, P.E.

-against-

Civil Action No.: 07 CV 6205(LAK)

DEWALT INDUSTRIAL TOOL CO.,
DEWALT CONSTRUCTION TOOLS and
BLACK AND DECKER (U.S.) INC.,

Defendants.

-----X

Defendant, Black & Decker (U.S.) Inc. s/h/a DeWalt Industrial Tool Co., DeWalt Construction Tools and Black & Decker (U.S.) Inc., by their attorneys, Calinoff & Katz LLP, and pursuant to Rule 26(a)(2) of the Federal Rules of Civil Procedure, provide the following disclosure concerning their liability expert expected to testify at trial:

1. Theodore J. Mitrou, P.E., as an expert witness to testify at trial.
 - a. A copy of Mr. Mitrou's report is annexed hereto as Exhibit "A." Mr. Mitrou's report, at page 2, provides the information considered by the witness in forming his opinions.
 - b. Mr. Mitrou has not authored any publications in the last ten years.
 - c. Mr. Mitrou is an employee of defendant Black & Decker (U.S.) Inc. and will not be paid any additional compensation for his testimony.
 - d. A listing of other cases in which Mr. Mitrou has testified as an expert at trial or deposition within the last four years is listed at page 10 of Exhibit "A."

- e. A copy of Mr. Mitrou's Curriculum Vitae is attached at page 7 of Exhibit "A."

Dated: New York, New York
February 26, 2008

Yours, etc.,

CALINOFF & KATZ LLP

BY:



Robert A. Calinoff (RAC5743)
Attorneys for Defendant
BLACK & DECKER (U.S.) INC. s/h/a
DEWALT INDUSTRIAL TOOL CO.
DEWALT CONSTRUCTION TOOLS
and BLACK AND DECKER (U.S.) INC.
140 East 45th Street
17th Floor
New York, New York 10017
(212) 826-8800

TO:

John E. Durst, Jr.
THE DURST LAW FIRM, P.C.
Attorneys for Plaintiff
319 Broadway, 4th Floor
New York, New York 10007
(212) 964-1000

Vitoli Mourzakhanov
v.
Black & Decker (U.S.) Inc.

Report of Ted Mitrou, P.E.
2/26/2008

PREFACE

On September 29, 2005, Mr. Mourzakhanov was allegedly using a DW304P DeWalt Reciprocating saw to remove a piece of 1 $\frac{1}{4}$ inch copper pipe from the basement of an existing property with the intention of installing a water meter.

According to Mr. Mourzakhanov, he was cutting a piece of horizontal pipe that was above his head by making a vertical cut through the pipe from top to bottom. Prior to the cut, he had made a horizontal cut on the portion of the same pipe that went from the ceiling area towards the floor.

Neither the reciprocating saw nor the blade was retained for investigation in this case.

According to Mr. Mourzakhanov a kickback of the blade occurred and resulted in his injury which consisted of a cut beginning between his middle finger and the finger adjacent to his pinky and extending towards the center of his palm.

The following provides an overview of the DW304P Reciprocating Saw, my opinions, comments and overall conclusions.

I have reviewed the following information related to the accident:

- Complaint—Mr. Vitoli Mourzakhanov v. Black & Decker (U.S.) Inc.
- UL Standard 60745-2-11, Hand-Held Motor-Operated Electric Tools – Safety – Part 2- 11: Particular Requirements for Reciprocating Saws
- Photographs of Mr. Mourzakhanov's injury
- Photographs from the accident site
- Mr. Mourzakhanov's depositions
- The litigation summaries of related products

Overall Description and Operation of the DW304P Reciprocating Saw

The DW304P Reciprocating Saw is the continuation of a family of tools that have been on the market place for over 20 years. These types of saws are used in a variety of applications primarily by professionals doing demolition, renovation, and new construction. Their usefulness is predicated on their ability to cut objects almost flush to an adjacent surface.

The DW304P differs from its predecessors, the DW303 and DW304 in as much as it provides the unique capability of inserting the saw blade with the teeth facing downwards, upwards, or in either direction side-to-side. The grasping profile of the neck and accompanying guard is common amongst these models.

The product is rated 10 amps, 120VAC; it is variable speed with a range of 0 to 2800 strokes per minute; and has a stroke length of approximately 1 $\frac{1}{8}$ inches. It weighs approximately 7.0 lbs and is approximately 17.5 inches in overall length. The product is marketed in a kit that includes the reciprocating saw, a bi-metal fine toothed saw blade (18 tpi), and a rugged plastic carrying case.

Findings and Opinions:

1. The DW304P is a proven design

More than 3.5 million reciprocating saws have been sold by Black & Decker using the neck and guard design incorporated in the DW304P. There has never been an injury similar to that of Mr. Mourzakhanov which suggests that when used properly the DW304P design is safe and practical and utilizes an effective guard design.

The DW304P conforms to UL Standard 60745-2-11, Hand-Held Motor-Operated Electric Tools – Safety – Part 2- 11: Particular Requirements for Reciprocating Saws. This industry consensus standard specifically calls out guarding requirements for this type of product.

Contractors recognize that the usefulness of this type of product is its ability to flush cut. Our guard design is optimized to our customers needs in the professional market. This design has been in the hands of our customers and unchanged for over 20 years. History is a testament to the adequacy of our guarding.

2. It is not possible to assess a manufacturing defect

Since the saw involved in the incident was not retained for evaluation, there is no possibility of assessing whether or not there was a manufacturing defect associated with this particular tool. However, I again refer to the history of this product as testament that neither design nor any alleged manufacturing defects have ever caused an injury similar to that of Mr. Mourzakhanov.

3. This accident scenario is inconsistent with the safety history of the product

There were conditions or circumstances contributing to this event that are missing or unexplainable. Examination of pictures taken at the accident scene suggests that the ability of Mr. Mourzakhanov to grasp the saw properly, maintain control, maintain his own balance, and access the pipe in a safe fashion were severely compromised.

The proximity of the wall and ceiling to the 1 $\frac{1}{4}$ inch copper pipe, the larger pipe that was adjacent and partially blocking the copper pipe, the height of the copper pipe, the minimal space in which Mr. Mourzakhanov had to work, and the poor lighting conditions created an environment that required planning, attentiveness, and common sense to successfully remove the pipe.

Mr. Mourzakhanov testified that he was about half way through pipe when kickback occurred “very quickly.” Since Mr. Mourzakhanov had first cut the portion of the same pipe to his right that was vertical, the weight of the loose pipe would have a tendency to spread the kerf during the second cut rather than pinch the blade causing the kick-back described by Mr. Mourzakhanov. In his second deposition, Mr. Mourzakhanov indicated that he had somehow displaced and wedged the pipe with a piece of lumber to gain access to it. However, the movement of the pipe is restricted to approximately an inch by its proximity to other pipes.

If the precipitating event of this accident was indeed kick-back, why it would occur half way through the pipe, as Mr. Mourzakhanov described, is not easily explained. If kick-back did occur, the stroke length of the blade is only 1 $\frac{1}{8}$ inches. If the blade was pinched at the absolute minimum extension such that the next stroke would suddenly push the tool backwards, the maximum displacement would only be approximately 1 $\frac{1}{8}$ inches. It is hard to conceive how Mr. Mourzakhanov’s hand could unexpectedly move approximately 3 inches from the neck of the

product, past the shoe which extends farther than the bottom portion of the guard, then rotate almost 90 degrees and engage a relatively fine toothed blade (18 tpi) long enough to sustain this kind of injury.

Kickback, simplistically defined as a sudden displacement or movement of the product towards the user typically through pinching of the blade, can also occur in a reciprocating saw if the blade either hits a surface behind what is being cut, or if only the tip of the blade is being used and the shoe is not pressed against the work piece. In any of these cases, kickback in a reciprocating saw is more of a startle event to the user than something that results in significant injury as long as the saw is being used and held properly.

4. Mr. Mourzakhanov could not have been grasping the saw securely

Based on Mr. Mourzakhanov's height, and the location of the pipe, it is likely that Mr. Mourzakhanov neither had his hand wrapped around the neck of the product nor did he have a firm grip. If his hand was wrapped around the neck of the tool with a firm grip, it is unlikely that his palm could end up past the shoe with his fingers parallel to and underneath the blade. The location of the pipe and surrounding conditions suggests that Mr. Mourzakhanov approached the pipe from a different angle that prevented him from grasping the tool properly and maintaining control of it during the cut.

5. The instruction manual illustrated safe operation of the product

According to his own testimony, Mr. Mourzakhanov was an experienced user of reciprocating saws. Even experienced users should follow the warning that is clearly visible on the nameplate of the tool: "Warning – To reduce the risk of injury, user must read and understand the instruction manual."

The following areas of instruction are relevant to this accident:

Warning: Read and understand all instructions. Failure to follow all instructions listed below, may result in electrical shock, fire and/or serious personal injury.

Stay alert, watch what you are doing, and use common sense when operating a power tool A moment of inattention while operating power tools may result in serious personal injury

Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

Use clamps or other practical way to secure and support the work piece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

Figures 4, 5, 6, and 7 illustrate typical uses of the product.

CONCLUSION

The DW304P is a safe and proven design. There have been over 3.5 million products sold by Black & Decker with the same neck and guard design without an injury similar to Mr. Mourzakhanov. The product complies with applicable national consensus standards and the neck and guard design have not been changed in more than 20 years. There is no evidence for examination with respect to an alleged manufacturing defect and no basis to assume the product that injured Mr. Mourzakhanov contained such a defect.

Mr. Mourzakhanov testified in his deposition that he was properly grasping the product with the shoe up against the pipe and after cutting about half way into the pipe he experienced a kickback resulting in his injury. Since the stroke length of the 6 inch blade is only $1\frac{1}{8}$ inches, it is difficult to reconstruct how his palm would rotate 90 degrees and travel past the lip of the rubber guard, over the shoe, and onto the blade that was approximately 3 inches away. It is also difficult to reconstruct how he could cut the pipe without holding the saw almost horizontally above his head.

Black & Decker provides an instruction manual with the product that among other things tells the user to use common sense and, quite relevant to this accident, not to over reach so that you can control the tool in an unexpected situation. As an experienced user, Mr. Mourzakhanov did not use common sense and he was unable to maintain control of the product in the orientation in which it was likely being used.



Ted Mitrou, P.E.
Senior Safety Assurance Manager

Attachments:

- Curriculum Vitae – Theodore J. Mitrou, P.E.
- Testimony Log

Theodore J. Mitrou, P.E.

Present Position: Senior Safety Assurance Manager
Black & Decker (U.S.) Inc.
701 East Joppa Road
Towson, Maryland 21286

Education: B.S. Electrical Engineering 1970
Marquette University, Milwaukee, WI

Professional: Registered Professional Engineer (PE) #9937
ASQ Certified Quality Engineer 1979 - 2000
Published Paper SPE 12163 "A Comparison of Magnetic Single-Shot
Instruments With a Directional MWD System"
Guest Lecturer – University of Maryland
Industry Advisory Board Member for RAMS (1996 – 2003)

Memberships: American Society of Safety Engineers
National Safety Council
National Fire Protection Association
National Society of Professional Engineers

Black & Decker (U.S.) Inc.
Power Tool Division, World Headquarters, Towson, MD

Black & Decker develops and manufactures power tools and accessories for the consumer market and is the world leader in professional quality portable power tools under its **DeWalt** industrial brand name.

Sep 03 – present **Senior Safety Assurance Manager**
Responsibilities include driving a proactive vision in the company's approach to product safety by participating in reviews for new product design as well as for major revisions to existing product. Product categories include various portable power tools and various household appliances. Responsibilities also involve support for product claims investigations and litigation. This necessitates continual research into all facets of product safety in an effort to assure a constant focus on user safety in the design, manufacture, and servicing of our products.

Feb 95 – Sep 03 **Director of Product Reliability**
Applied reliability engineering discipline to professional (DeWalt) and consumer product development. Hired, trained, and established reliability engineering organization for design centers in US, Germany, and the UK. Managed New Product Quality Engineering at key plants.

Responsibilities include reliability engineering, new product quality engineering, product safety, ISO certification, UL / CSA / TUV compliance, warranty reduction.

Managed all technical training for engineering; personally taught both reliability engineering and Six Sigma methodology worldwide.

Feb. 93 - Feb 95

Director of Product Reliability
Black & Decker, Household Products Division, Shelton, CT

Contracted as a reliability consultant for four months to analyze B&D worldwide test and reliability needs. Hired permanently to execute plan for the creation of a Reliability Center capable of test engineering, reliability and safety engineering, and failure analysis. Overhauled engineering lab practices, brought reliability engineering culture into the product development process. Created and taught a customized 12 hour reliability engineering course to B&D associates from Mexico, Singapore, Canada, and the States. Represented B&D in industry (American Home Appliance Manufacturers Association).

1990 –1993

Director of Quality Assurance
Kollmorgen, Northampton, MA

Kollmorgen, Electro-optical division, military supplier of high tech submarine periscopes, infrared imaging systems, armored vehicle sights, and electro-optical gun directors.

Senior manager responsible for divisional quality and reliability of two manufacturing facilities. Led management effort to improve competitiveness through application of continuous improvement concepts including customer focus, teaming, and empowerment. Changed quality approach from one of inspection to prevention, audit, and employee certification. Developed and taught in-house workshops on teaming, group dynamics, problem solving and facilitation. Mil-Q-9858 / ISO 9000 based quality system.

1988-1990

Director, Electrical / Electronic Products
Springborn Laboratories, Inc., Enfield, CT

Springborn Laboratories, Inc. is an independent lab that provides testing, quality assurance, and inspection services through its facilities in the United States, Europe, Hong Kong, and Taiwan.

Top official in charge of Springborn's electrical testing and quality assurance services for the commercial, military, and aerospace industries worldwide. Responsible for technical development, marketing, sales, and business expansion. Restructured company quality systems and upgraded lab to obtain Defense Department (DESC) lab qualification for mil spec. testing of printed circuit boards.

1981-1988

Director, Quality Assurance
Teleco Oilfield Services, Meriden, CT

Teleco Oilfield Services is a manufacturer of precision electronic instrumentation used exclusively by the oil industry.

Restructured and managed Teleco's quality systems internationally. Introduced principles of statistical control, total quality control, and failure analysis. Planned, built and developed mechanical and electrical calibration laboratories. Planned, staffed, and implemented training function providing formal instruction to local and satellite personnel. Recruited and directed quality managers in Singapore, Scotland, Louisiana, California, and Alaska. Wrote, presented, and published technical paper on accuracy of Teleco's measurement systems.

1975-1981

Quality Manager
AEG Power Tools, Norwich, CT

AEG Power Tools is a manufacturer of industrial power tools.

Assist in the startup of first AEG American power tool manufacturing facility. Created, equipped, staffed, and managed quality department and engineering test laboratory for new plant. Responsible for product safety and managed certification programs with Underwriters Labs and Canadian Standards. Safety representative for AEG in industry organizations such as the Power Tool Institute (PTI) and UL Industry Advisory Council (IAC).

1970-1975

Senior Engineer
Underwriters Laboratories, Melville, NY

Underwriters Laboratories - Test Lab for product safety.

Evaluated consumer and industrial products for safety. Planned and supervised test programs on electronic equipment, power tools, gardening appliances, and other commercial products. Experienced rapid growth from assistant engineer to project engineer to senior engineer within four years.

Ted Mitrou, P.E.
Testimony Log

CASE NAME	JURISDICTION/DOCKET NO.	PRODUCT	DEPOSITI ON DATE (FACT)	DEPOSITI ON DATE (EXPERT)	TRIAL DATE
Stephen and Nancy Rogers v. Black & Decker (U.S.) Inc.	In the U.S. District Court for the Northern District of New York, Civil Action No. 03-CV-0767	Charger	3/31/05	3/31/05	None
Anthony and Arlene Burlew v. Black & Decker (U.S.) Inc.	In the U.S. District Court for the District of New Jersey, Civil Action No. 004-1392 (WHW)-CV-0767	Router	5/26/06	10/27/05	None
Hall Estates Condo Association Royal Indemnity Co. & Travelers Indemnity Co. v. Black & Decker (U.S.) Inc.	In the Suffolk Superior Court, MA, Civil Action No. 02- 3853 MA	Dustbuster			12/04/06 Defense Verdict
Gordon McDougall v. Black & Decker (U.S.) Inc.	In the Court of Appeal of Alberta, Court of Queen's Bench Case No. 0503-20699, Appeal No. 0703 0077AC	Charger	2/7/07		None
Selina Reid v. Home Depot and Black & Decker (U.S.) Inc.	In the U.S. Southern District of NY, Civil Action No. 05 CN 5110 (PKL) (AJP)	Lawnmower		08/29/07	None
Mourzakhanov v. Black & Decker (U.S.) Inc.	In the U.S. District Court for the Southern District of NY, Civil Action No. 07 CV 6205 (LAK)	Reciprocating Saw	2/5/08		

STATE OF NEW YORK)
:ss
COUNTY OF NEW YORK)

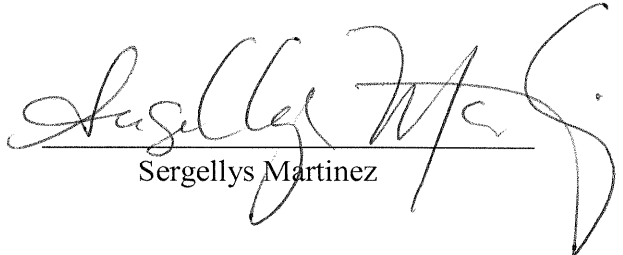
Sergellys Martinez, being duly sworn, deposes and says:

Deponent is not a party to the action, is over 18 years of age and resides in Bronx, New York;

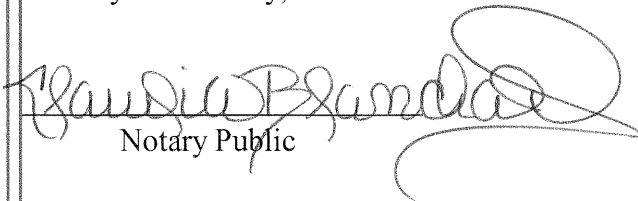
On February 26, 2008, deponent served the within EXPERT DISCLOSURE OF
THEODORE J. MITROU, P.E. upon:

John E. Durst, Jr.
The Durst Law Firm, P.C.
Attorneys for Plaintiff
319 Broadway
New York, New York 10007

by depositing a true copy of same enclosed in a post paid properly addressed wrapper, in an official
depository under the exclusive care and custody of the United States Postal Service within the State
of New York.


Sergellys Martinez

Sworn to before me this
26th day of February, 2008


Notary Public

CLAUDIA BLANCHARD
Notary Public, State of New York
No. 01BL6160575
Qualified in Queens County
Commission Expires Feb. 12, 2011